

**Please replace the Abstract, with the following rewritten Abstract:**

Proteins containing modified human DDR2 cytosolic tyrosine kinase domains that have an increased autophosphorylation and tyrosine kinase activity as compared to the proteins with unmodified domains are described. The modifications consist of replacing one or more of the tyrosines at positions 736, 740 or 741 in the activation loop of human DDR cytosolic tyrosine kinase domain having SEQ ID NO:1 with phenylalanine, alanine or glycine.